


QA: QA


**U.S. DEPARTMENT OF ENERGY
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT
OFFICE OF QUALITY ASSURANCE**

**REPORT FOR AUDIT OQAC-ORD-03-08
OF THE OFFICE OF REPOSITORY DEVELOPMENT
IN LAS VEGAS, NEVADA**

AUGUST 4 - 8, 2003

Prepared by: 
James V. Voigt
Audit Team Leader
Navarro Quality Services

Date: 9/8/2003

Approved by: 
R. Dennis Brown
Director
Office of Quality Assurance

Date: 9/10/03

EXECUTIVE SUMMARY

Auditors representing the Office of Civilian Radioactive Waste Management (OCRWM) conducted a compliance-based audit of the quality-affecting activities performed by the Office of Repository Development (ORD). The audit was conducted from August 4 to 8, 2003. The audit scope included ORD procedural adequacy and compliance. From this review, the audit team evaluated the ORD effectiveness in implementing the Quality Assurance (QA) program.

The audit team concluded that the procedures were adequate and that the procedural implementation was satisfactory. Therefore, the audit team has concluded that ORD was adequately and effectively implementing the QA program.

The audit team identified one best practice. The OCRWM QA Training Needs Assessment Matrix (currently under development) is an excellent approach to tracking the training needs for ORD personnel.

The audit team identified a single noncompliance with AP-2.1Q, *Indoctrination and Training of Personnel*. The affected employee corrected the condition during the audit. Condition Report ORD(O)-03-D-225 documents that one employee had not completed a required training assignment. This was an isolated occurrence limited to 1 of the 93 employees audited for compliance with their required Training Requirements Matrix.

The team made the following recommendations:

- Revise procedure LP-2.5Q-OCRWM, Revision 0, ICN 0, *Management Assessment*, to clarify Section 5.3.2 for OCRWM Director Approval of the Quality Assurance Management Assessment (QAMA) report. Either remove the step for OCRWM Director approval or require specific language in the QAMA report indicating OCRWM Director approval.
- Revise procedure AP-7.5Q, Revision 1, ICN 1, *Control of Purchased Items and Services*, to update the references to records and forms. Change the listed record in paragraph 6.1 from "Transmittal letter to RC" to "Deliverable Submittal Letter from BSC to DOE." Update the references to other procedural forms (e.g., paragraph 5.2.1d refers to a "Document Control Action Request" from AP-6.1Q, Revision 3, *Document Control*, however, the current version of AP-6.1Q does not refer to this form).
- Update or cancel procedure YAP-SIII.6Q, Revision 1, ICN 0, *Documentation of Standardized Geotechnical Borehole Logging*. This procedure contains obsolete references and never has been implemented.

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

Representatives of the OCRWM conducted a compliance-based audit from August 4 to 8, 2003, of ORD activities and processes in Las Vegas, Nevada. The audit team assessed ORD compliance with their implementing procedures through personnel interviews and documentation reviews. In addition, the audit team reviewed those implementing procedures for adequacy in implementing the requirements of the DOE/RW-0333P, Revision 13, *Quality Assurance Requirements and Description* (QARD). In a follow-up to a previous audit, the audit team determined the effectiveness of corrective actions from closed ORD deficiency documents.

The audit team examined the implementation of the following QARD sections:

Section 1	Organization
Section 2	QA Program
*Section 3	Design Control
Section 4	Procurement Document Control
Section 5	Implementing Documents
Section 6	Document Control
Section 7	Control of Purchased Items and Services
*Section 15	Nonconformances
Section 16	Corrective Action
Section 17	QA Records
Supplement II	Sample Control
*Supplement III	Scientific Investigation
*Supplement V	Control of Electronic Management of Data
*Appendix C	Monitored Geologic Repository

*The ORD has no current scope of work within these sections of the QARD.

1.2 AUDIT TEAM MEMBERS AND OBSERVERS

Audit Team Members

James E. Flaherty, Navarro Quality Services (NQS), Auditor
Donald J. Harris, NQS, Auditor
Christian M. Palay, NQS, Audit Team Leader in Training
James V. Voigt, NQS, Audit Team Leader

Attachment B, Summary of Audit Results, details audit team member assignments.

Observer

Robert Latta, U.S. Nuclear Regulatory Commission, On-Site Representative in Las Vegas, Nevada

2.0 AUDIT SUMMARY

2.1 AUDIT MEETINGS AND PERSONNEL CONTACTED

A pre-audit meeting was held on August 4, 2003, in Las Vegas. Daily team caucuses identified the progress of the audit and discussed audit status, including potential conditions adverse to quality. The audit team leader held daily meetings with ORD management that discussed the audit issues and status. The audit concluded with a post-audit meeting on August 8, 2003, in Las Vegas, Nevada. Attachment A, Personnel Interfaces, lists the personnel contacted during the audit, including those who attended the pre-audit and post-audit meetings.

2.2 PROGRAM DISCUSSION

2.2.1 Organization

Procedure LP-1.1Q-OCRWM, Revision 0, ICN 0, *Organization*, describes the organizational setup and interfaces for OCRWM. The procedure does not reflect current ORD management functions, responsibilities and authorities, and the ORD organization chart. This discrepancy was self-identified in deficiency report number OCRWM(O)-03-D-075 and corrective action is on-going. The QARD, Revision 13, has been updated to reflect the current OCRWM organizational information. Current plans call for the cancellation of LP-1.1Q-OCRWM when Revision 14 of the QARD is issued. Other programmatic actions such as delegation of authority, maintenance of functional position descriptions, and management assessments were also examined with ORD management staff. The audit team determined that these actions were in compliance with the procedurally defined requirements.

2.2.2 Quality Assurance Program

2.2.2.1 AP-2.1Q, Revision 2, ICN 2, *Indoctrination and Training of Personnel*

Each ORD Office Director implements this procedure to mandate training for their personnel via a Training Requirements Matrix (TRM). When an Office Director approves the training matrix, the personnel are required to complete the training before starting the associated quality-affecting work. The Information Management Services Division Acting Director stated that the training matrices in the TrainServe online database were current and could be used to evaluate staff compliance with their individual TRM. In addition, the training record examinations included the Management and Technical Support (MTS) contractor staff because they perform quality-affecting work. Attachment C lists the training records (identified by their TrainServe identification numbers) that were evaluated by the audit team.

Employee number 8501 had not taken training class LPGET00-013, "Introduction to Quality Assurance." This class was required training as specified in the TRM. This was a noncompliance with the AP-2.1Q, paragraph 5.4, which requires that the employee complete indoctrination and training as specified in the TRM. The noncompliance was documented as a condition adverse to quality in accordance with AP-16.1Q, Revision 6, ICN 0, *Management of Conditions Adverse to*

Quality (see Condition Report ORD(O)-03-D-225). This condition report was closed as “corrected during the activity” when the training of employee 8501 was completed before the closure of the audit. The other 92 employees were in compliance with their TRMs. This condition adverse to quality was considered isolated and non-impacting because the employee worked in a non-quality-affecting role in public relations for ORD.

The ORD is developing the OCRWM QA Training Needs Assessment Matrix. The audit team considers this tool an excellent approach to tracking the training needs for ORD. This new matrix identifies all required training (e.g., classroom, computer-based, and self-study with examination) based on the specific job function of each staff member. Moreover, this training matrix is recognized by the audit team as satisfying the OCRWM Management Improvement Initiative requirement that all personnel be trained to the implementing procedures prior to the start of quality-affecting work. The training matrix also identifies incomplete training status for each employee via shaded areas on the matrix. Once a staff member completes the specified training, the Responsible Manager must sign a document attesting to the completion. Therefore, the audit team recognized a best practice in the development of the new matrix and its associated processing.

2.2.2.2 AP-2.2Q, Revision 1, ICN 2, *Establishment and Verification of Required Education and Experience of Personnel*

ORD is required to verify the education and experience of employees in relation to their position description in accordance with this procedure. ORD implementation was reviewed by visual inspection of a sample of 29 ORD/MTS employee position descriptions against the documented education and experience verifications. In addition, procedural compliance was assessed via interviews with ORD staff and MTS staff. Attachment C lists the verification records that were evaluated by the audit team. The Verifications of Education and Experience (VOEE) of ORD staff were in compliance with the procedure. Furthermore, the corrective actions for the closed Condition Report ORD(O)-03-D-110 were verified as effective. This Condition Report documented a condition adverse to quality that involved previous ORD verifications of education that lacked the assurance that education was from an accredited institution. The audit team’s assessment of the corrective action was accomplished by sampling VOEEs that were not included in the verification closure review of the Condition Report.

2.2.2.3 AP-2.20Q, Revision 1, ICN 1, *Self-Assessments*

According to the procedure definition, self-assessments are to evaluate the work for opportunities for improvement, to self-identify conditions adverse to quality, and to find event precursors and prevent performance shortfalls. In the context of this procedure, self-assessments include management assessments. Management assessments evaluate the total process: how well the management system meets customer requirements; the expectations for safely performing work; and the organizational mission, goals, and objectives.

The audit team obtained the ORD fiscal year 2003 self-assessment schedule from Linda Quering, the ORD Self-Assessment Program Manager. The audit team reviewed the ORD self-assessment schedule, updated August 6, 2003, to select a sample of six self-assessments to audit. Attachment C lists the self-assessments that were reviewed by the audit team. The audit team concluded that the sampled self-assessment reports were in compliance with the procedure.

2.2.2.4 LP-2.5Q-OCRWM, Revision 0, ICN 0, *Management Assessments*

ORD implemented the procedure to produce the fiscal year 2002 Quality Assurance Management Assessment Plan, Interim Report, and Final Report. The audit team determined that these documents were in compliance with the procedure. In addition, the fiscal year 2003 Quality Assurance Management Assessment Plan was discussed with ORD management and found to be on schedule.

2.2.3 Design Control

The audit team discussed the implementing procedure for Design Control, AP-3.9Q, Revision 1, ICN 0, *Interface Management Process*, with the Program Manager for the ORD Office of Project Control and Monitoring. This procedure had not been implemented during the period covered by the audit.

2.2.4 Procurement Document Control

The Contracts Management Division implements LP-4.1Q-OCRWM, Revision 3, ICN 0, *Procurement Actions*. Attachment C lists the procurements that were evaluated against the revision of the procedure in effect at the time. The audit team concluded that these procurement documents were in compliance with the requirements of the procedure.

AECL and UCCSN are on the Qualified Suppliers List (QSL). AECL and UCCSN deliverables are accepted by DOE letter. Four UCCSN Tasks (4, 9, 15, and, 27) have been accepted by DOE during the period audited. One AECL Task Order (YMP-03-04, Revision 01) is currently in ORD review. The audit team evaluated all the procurement actions for the period covered by the audit.

2.2.5 Implementing Documents

ORD has revised five of their sixteen procedures since January 1, 2003, in accordance with AP-5.1Q, Revision 3, ICN 3, *Plan and Procedure Preparation, Review, and Approval*. The audit team reviewed those five procedures and their associated records packages to verify compliance. Attachment C lists the procedures reviewed by the audit team.

Through review of record packages and interviews, the audit team concluded that the four procedures have been satisfactorily developed, reviewed, and approved in accordance with AP-5.1Q, Revision 3, ICN 3.

2.2.6 Document Control

The audit team discussed the implementation of procedure AP-6.28Q, Revision 0, ICN 2, *Document Review*, with ORD personnel from the Office of License Application and Strategy. This procedure had not been implemented during the period covered by the audit. All deliverables for the audited period were evaluated to determine if an AP-6.28Q review was required. Two deliverables were completed during the audited period and two deliverables are still in process. Under the requirements for the acceptance of deliverables in AP-7.5Q, neither of the completed deliverables was considered a technical deliverable. Therefore, AP-6.28Q reviews were not required.

2.2.7 Control of Purchased Items and Services

ORD implements AP-7.5Q, Revision 1, ICN 1, *Submittal, Review and Acceptance of Deliverables*. Attachment C lists the deliverables that were evaluated by the audit team for compliance to procedural requirements for the period covered by the audit.

All of these deliverables had date stamped OCRWM Deliverable Receipt Acceptance Reviews. Two of the deliverables (TDR-WIS-PA-000006 and TDR-EBS-NU-000003) are complete. Deliverables PAD204 and RPA 102000D are in process. Deliverable PAGSC2060D is Non-Q. The four Q deliverables represent all the Q Deliverables for the audited period and are in compliance with procedural requirements.

2.2.8 Nonconformances

BSC has been implementing AP-15.3Q, Revision 0, ICN 0, *Control of Technical Product Errors*. This procedure will soon be integrated into the new OCRWM Corrective Action Program. Under the current procedure, the BSC Technical Error Report Coordinator processes technical error reports that the technical report owner has initiated to disposition identified errors. The ORD has identified discrepancies and passed them on to the BSC technical report owner.

2.2.9 Corrective Actions

ORD self-identifies and documents conditions adverse to quality in accordance with AP-16.1Q, *Management of Condition Adverse to Quality*. The audit team reviewed ORD-initiated deficiencies using Revision 5 and Revision 6 of the procedure, which became effective about 2 months prior to the audit. ORD initiated two deficiencies after that date. The audit encompassed ORD deficiencies that were closed since December 2002 (December 2002 was when the last ORD compliance audit occurred). The population sampled for the audit is as follows:

1. ORD(O)-03-D-048, initiated by OQA, closed 2/3/2003.
2. ORD(O)-03-D-106, initiated by OPS director, closed 4/17/2003.
3. ORD(O)-03-D-108, initiated by OQA, closed 4/29/2003.
4. ORD(O)-03-D-110, initiated by OQA, closed 7/14/2003
5. ORD(O)-03-D-124, initiated by BSC QA, closed 4/20/2003.
6. ORD(O)-03-D-190, initiated by OQA, closed 7/28/2003.
7. ORD(O)-03-D-207, initiated by MTS support contractor to ORD, closed 7/28/2003
8. ORD(O)-03-O-036 initiated by OQA, closed on 1/8/2003
9. OCRWM(O)-03-D-191, initiated by OLA&S manager, closed 7/21/2003

Of these deficiencies, items 2, 7, & 9 were initiated by organizations within the ORD line organization. Items 1, 3, 4, 6, and 8 are excluded because they were initiated by OCRWM OQA, which is not considered part of the ORD line organization. The audited deficiencies were initiated appropriately by ORD per Section 5.2 of the procedure, with the exception of item 9, which was determined by OQA as not being a condition adverse to quality and was voided in compliance with Section 5.3.1, paragraph c) of the procedure.

Corrective actions were completed in a timeframe that was consistent with the original plan in the responses to the deficiencies. There were no requests for extended processing for the audited deficiencies.

The audit team selected another sample from the nine closed ORD deficiencies to review for effectiveness of corrective actions. The sample was based on those closed deficiencies having responses that outlined corrective actions. The reviewed deficiencies and the audit team's evaluations are as follows:

- ORD(O)-03-D-108: This deficiency documented the lack of adequate planning for procedural transfer of ownership. The Project Overview Review Board (PORB) Position Paper 030716-01 recommended the reassignment of procedural responsibilities as well as a prioritized schedule for reformatting existing procedures in accordance with the current version of AP-5.1Q. These PORB recommendations were adopted and put into effect as evident by a Memorandum to OCRWM and ORD Principal Staff from the OCRWM Director. These actions are further evidence of the continued effectiveness of the corrective action take for this deficiency report.
- ORD(O)-03-D-110: This deficiency documented a condition adverse to quality that involved previous ORD verifications of education that lacked the assurance that employee education was from an accredited institution. The assessment of the corrective action was accomplished by sampling VOEEs that were not included in the verification closure review of the Condition Report. The audit team concluded that the corrective actions for the closed deficiency were effective as the reviewed VOEEs contained the evidence of accredited educational institutions.
- ORD(O)-03-D-190: This deficiency documented that someone else other than the Quality Assurance representative electronically approved a Document Action Request (DAR). In evaluating the corrective actions for this deficiency, the audit team discovered that a separate action was taken after the closure of this deficiency that will effectively preclude recurrence this condition. The DAR process for the current revision to AP-5.1Q does not require the QA review so this will further preclude any potential recurrence of the condition identified in this deficiency.

2.2.10 Quality Assurance Records

ORD processes quality-affecting records in accordance with AP-17.1Q, Revision 2, ICN 5, *Record Source Responsibilities for Inclusionary Records*. This procedure provides a process for capturing the ORD staff's "Signatures and Initials List." The list provides an ability identify staff members who can create or correct quality-affecting records in accordance with the procedure. Attachment C lists the signature and initials list from each ORD Office and the MTS support contractor reviewed by the audit team.

If the signature and initials lists are updated, then ORD is required to cross-reference the update with the original list. The audited lists were cross-referenced to the original lists with the exception of that for the Office of Facility Operations. This Office was newly formed, so the original list was found to be adequate.

The procedure also requires that the first page of a quality-affecting record contain a title, subject line or description, and a QA designator. In addition, any corrected information must be dated and initialed, stamped, or signed. Attachment C lists the records reviewed by the audit team. These

records did have correct first pages, and the audit team concluded that those requirements of the procedure were met.

AP-17.1Q requires that individual records and record packages be submitted to the RPC within sixty days of completion. Attachment C lists the completed records that were evaluated by the audit team. These records did meet the submission deadlines.

There are specific requirements in the procedure relative to non-paper media and compact disks. Per the ORD Records Point of Contact, there have been no records created by ORD that required implementation of this procedure step.

The procedure also mandates adequate security and protection for QA records. Through interviews with the ORD Records Point of Contact and the Contracts Point of Contact, the audit team reviewed the protection and security of the QA records for which ORD is responsible. Attachment C lists the Q documents that were evaluated. The following Q documents are locked in fireproof cabinets in compliance with this procedure step:

- BSC contracts were locked in fireproof cabinets in rooms 604, 608, 612, and 613.
- The USGS contracts were locked in fireproof cabinet in 603.
- The AECL contract was locked in fireproof cabinet in 605.

The procedure also specifies that a Record Problem Report be initiated when a correction has to be made to a previously submitted record. Per the ORD Records Point of Contact, there has been no ORD implementation of this procedure step.

When a previously submitted record has to be supplemented, the table of contents of the supplemental record must identify the accession number of the previously submitted record package. The audit team reviewed the following tables of content for record packages:

- OCRWM Signature and Initials List for DOE/OFFICE of Repository Development/Office of License Application and Strategy.
- Signature And Initials List for MTS
- Signature And Initials List for Office of the Deputy Director ORD/
- Signature And Initials List for OPC&M
- Records Package Table Of Contents For Verification Of Education and Experience for Tish Morgan

2.2.11 Sample Control

AP-SII.2Q, Revision 1, ICN 1, *Requesting, Transferring, and Returning Yucca Mountain Project Geologic Borehole Specimens*, defines the process for the allocation of YMP geologic specimens. Several Specimen Removal Requests were examined for DOE participation. The audit team determined that the reviewed documents were in compliance with the procedure. Specific documents reviewed are listed in Attachment C of this report.

2.2.12 Scientific Investigation

ORD is responsible for the development, review and approval of YAP-SIII.6Q, Revision 1, ICN 0, *Documentation of Standardized Geotechnical Borehole Logging*, an obsolete Yucca Mountain Administrative Procedure (YAP) that implements the requirements of Supplement III. Per the ORD Senior Management Point of Contact, the last logging activity was conducted between 1998 and 1999. ORD was responsible for the procedure at the time because ORD was the only organization that held contracts or agreements with the then Management and Operating Contractor, the USGS, and the national laboratories. As such, ORD was the only authority able to coordinate logging activities.

The BSC Performance Assessment senior scientist and logging Subject Matter Expert stated that there was some logging activity done using different procedures for the boreholes SD-6 and WT-24. However, this procedure was never utilized due to the lack of resources and time for continuous geophysical logging described in the procedure. The ORD Technical Lead responsible for logging agreed that the procedure should be cancelled if it is not going to be needed in the future.

Therefore, the audit team recommended that this procedure be either updated or cancelled. A Document Action Request was initiated and accepted during the audit to cancel YAP-SIII.6Q by November 30, 2003.

2.2.13 Control of the Electronic Management of Data

The Information Management Services Division Acting Director stated that no ORD office performs activities associated with QARD Supplement V because no Q software or Q data is being managed by ORD or any of its direct technical support contractors (e.g., MTS, RSIS, etc.).

2.2.14 Monitored Geologic Repository

AP-AC.1Q, *Expert Elicitation*, has not been implemented on the Yucca Mountain Project since 1998. No assessment is therefore made on the adequacy of expert elicitation implementation.

2.2.15 ORD Policies

The audit team interviewed Bertha Terrell, ORD Policy Coordinator, and discovered that ORD implements the non-quality-affecting procedure, AP-REG-013, Revision 0, ICN 0, *Policy Development*. This procedure required the ORD Policy Coordinator to coordinate a policy review by all ORD Responsible Managers annually. There was an annual review underway during the audit. When this review is complete, it will be the first comprehensive evaluation of ORD policies to cancel outdated ones and update the needed ones per procedure.

The audit team reviewed policy POL-YMP-2003-002, *Preparation, Review, and Approval of Technical Direction Letters* (TDLs). This policy contained very specific guidance to prevent any QARD violation. For instance, the policy contained the management mandate that all TDLs to BSC contain a disclaimer that the TDL does not add any scope and that BSC should notify the Contracting Officer's Representative if they feel that the TDL does add scope. Furthermore, TDLs must have OQA concurrence before being issued to BSC.

The audit team reviewed policy POL-YMP-2003-004, *Contracting Officer (CO) Authorization Letters*, and determined that the policy was very effective in the establishment of roles, responsibilities, authority, and accountability. For instance, the policy stated that a CO authorization letter shall be signed by a CO. In addition, any contractual authorization given orally by unauthorized personnel shall be brought to the attention to the Deputy Director, Office of Repository Development.

3.0 AUDIT RESULTS

3.1 PROGRAM ADEQUACY, IMPLEMENTATION, AND EFFECTIVENESS

The audit team determined that ORD procedures were adequate in implementing the QARD. In addition, the audit team ascertained that ORD was in compliance with programmatic procedures. The audit team concludes that the ORD QA program was effective.

3.2 AUDIT ACTIVITIES

In summary, the audit team reviewed the ORD activities related to organization, training, personnel qualifications, self-assessments, procurement, deliverable acceptance, procedure development, corrective actions, and record source responsibilities. With the exception of one minor condition adverse to quality in the area of training, there were no significant QA programmatic non-compliances discovered by the audit team.

3.3 SUMMARY OF AUDIT RESULTS

The audit identified one condition adverse to quality that was documented as a Condition Report. ORD promptly addressed the issues, and the audit team satisfactorily verified the corrective action during the audit. No further action is required by ORD. Three recommendations were made by the audit team for ORD management consideration. The audit team identified one best practice for ORD management recognition.

3.3.1 Condition Reports

ORD(O)-03-D-225: A noncompliance with AP-2.1Q, *Indoctrination and Training of Personnel* was identified and corrected during the audit. This Condition Report addresses one employee failure to complete a required training assignment. This condition was isolated to one of the 93 employees audited for compliance with their required TRM.

3.3.2 Recommendations

- Revise procedure LP-2.5Q-OCRWM, Revision 0, ICN 0, *Management Assessment*, to clarify Section 5.3.2 for OCRWM Director Approval of the Quality Assurance Management Assessment (QAMA) report. Either remove the step for OCRWM Director approval or require specific language in the QAMA report indicating OCRWM Director approval.

- Revise procedure AP-7.5Q, Revision 1, ICN 1, *Control of Purchased Items and Services*, to update the references to records and forms. Change the listed record in paragraph 6.1 from “Transmittal letter to RC” to “Deliverable Submittal Letter from BSC to DOE.” Update the references to other procedural forms (e.g., paragraph 5.2.1d refers to a “Document Control Action Request” from AP-6.1Q, Revision 3, *Document Control*, however, the current version of AP-6.1Q does not refer to this form).
- Update or cancel procedure YAP-SIII.6Q, Revision 1, ICN 0, *Documentation of Standardized Geotechnical Borehole Logging*. This procedure contains obsolete references and never has been implemented.

3.3.3 Best Practices

The audit team identified one best practice. The OCRWM QA Training Needs Assessment Matrix (currently under development) is an excellent approach to tracking the training needs for ORD personnel.

3.3.4 Follow Up of Previously Issued Deficiency Documents

- ORD(O)-03-D-108: This deficiency documented the lack of adequate planning for procedural transfer of ownership. The Project Overview Review Board (PORB) Position Paper 030716-01 recommended the reassignment of procedural responsibilities as well as a prioritized schedule for reformatting existing procedures in accordance with the current version of AP-5.1Q. These PORB recommendations were adopted and put into effect as evident by a Memorandum to OCRWM and ORD Principal Staff from the OCRWM Director. These actions are further evidence of the continued effectiveness of the corrective action take for this deficiency report.
- ORD(O)-03-D-110: This deficiency documented a condition adverse to quality that involved previous ORD verifications of education that lacked the assurance that employee education was from an accredited institution. The assessment of the corrective action was accomplished by sampling VOEEs that were not included in the verification closure review of the Condition Report. The audit team concluded that the corrective actions for the closed deficiency were effective as the reviewed VOEEs contained the evidence of accredited educational institutions.
- ORD(O)-03-D-190: This deficiency documented that someone else other than the QA Representative electronically approved a Document Action Request. The request process for the current revision to AP-5.1Q does not require the QA review, so this will further preclude any potential recurrence of the condition identified in this deficiency.

4.0 ATTACHMENTS

Attachment A - Personnel Interfaces
Attachment B - Summary of Audit Results
Attachment C - Objective Evidence Examined

Attachment A – Personnel Interfaces

Name	Organization	Pre-Audit Meeting	Contacted During Audit	Post-Audit Meeting
Arthur, W. John	DOE/ORD	X	X	X
Bennington, Mary E.	DOE/OQA	X		X
Blaylock, James	DOE/OQA	X		X
Coleman, Drew	DOE/PLAD		X	
Compton, James R	DOE/OPCM		X	
Cooper, Emily	DOE/OLAS	X		
Dennis, Kay	DOE/ORD		X	
Dyer, J. Russell	DOE/ORD	X	X	X
Elder, Kenneth	DOE/OPCM	X	X	
Flaherty, James E.	NQS	X		X
Gilbert, Nora	DOE/OPS		X	
Glover, Marcelle D.	DOE/OPS/CMD		X	
Harris, Donald J.	NQS	X		X
Hasson, Robert P.	NQS			X
Hopkins, Steve	BSC		X	
Hunter, Andrea	BSC		X	
Kavchak, Marilyn	NQS	X		
Kirby, Deborah	MTS	X	X	
Kozai, Wayne N.	DOE/OPCM	X		
Kratzinger, Frank J.	MTS	X	X	X
Latta, Robert M.	NRC	X		X
Lucero, Anthony L.	DOE/OPS		X	
Mele, Ray	MTS		X	
Mellington, Suzanne	DOE/OFO	X		
Newbury, Claudia M.	DOE/OLAS		X	X
Palay, Christian M.	NQS	X		X
Payne, Christine L.	DOE/OFO	X		
Quering, Linda F.	DOE/OPS	X	X	X
Ray, Lisa D.	DOE/OPS/CMD	X	X	X
Russell, Paige R.Z.	DOE/OLAS		X	
Sanchez-Bartz, Peggy F.	DOE/ORD	X		

Attachment A – Personnel Interfaces (cont.)

Name	Organization	Pre-Audit Meeting	Contacted During Audit	Post-Audit Meeting
Spence, Richard	DOE/OFO	X	X	X
Streeter, John	DOE/ECP	X		
Stemley, Ernest L.	BSC/RC		X	
Toft, Richard L.	MTS	X		X
Terrell, Bertha	DOE/OLAS		X	
Thompson, Kathleen	BSC/RPC		X	
Trebules, Victor	DOE/OPCM	X		
Tynan, Mark C.	DOE/OLAS	X	X	
Van Der Puy, Mark	DOE/OPS	X	X	
Voigt, James V.	NQS	X		X
Voltura, Nancy	DOE/OQA	X		
Warriner, David	DOE/OPS		X	
Womack-Harris, Sharon	BSC/RPC		X	
Wooley, W. Jake	DOE/OPS	X	X	
Young, Fran G.	DOE/OPS		X	
Ziegler, Joseph D.	DOE/OLAS	X		

Legend:

BSC = Bechtel SAIC Company, LLC
 NQS = Navarro Quality Services
 DOE = U.S. Department of Energy
 NRC = U.S. Nuclear Regulatory Commission
 ORD = Office of Repository Development
 OQA = Office of Quality Assurance
 MTS = Management & Technical Support Services
 RPC = Records Processing Center
 OPS = Office of Project Support
 CMD = Contracts Management Division
 OPCM = Office of Project Control and Monitoring
 OFO = Office of Facility Operations
 PLAD = Postclosure & License Acquisition Division
 OLAS = Office of License Application & Strategy
 ECP = Employee Concern Program
 RC = Review Coordination

Attachment B - Summary of Audit Results

QARD Section	Implementing Documents	Auditor	Condition Reports	Recommendations	Best Practices	Program	Compliance	Overall
1	LP-1.1-OCRWM REV 0 ICN 0	J. Voigt				Adequate	Satisfactory	Effective
	AP-2.1Q REV 2 ICN 1	D. Harris	ORD(O)-03-D-225		#1	Adequate	Satisfactory	
	AP-2.2Q REV 1 ICN 0	D. Harris				Adequate	Satisfactory	
2	AP-2.20Q REV 1 ICN 0	D. Harris				Adequate	Satisfactory	Effective
	AP-2.22Q REV 0 ICN 0	D. Harris				Adequate	Satisfactory	
	LP-2.5Q-OCRWM REV 0 ICN 0	J. Voigt		#1		Adequate	Satisfactory	
	AP-3.9Q REV 1 ICN 1	J. Flaherty				Not implemented	N/A	N/A
4	LP-4.1Q-OCRWM REV 2 ICN 0	J. Flaherty				Adequate	Satisfactory	Effective
	LP-4.2Q-OCRWM REV 0 ICN 1	J. Flaherty				Not implemented	N/A	
5	AP-5.1Q REV 3 ICN 3	D. Harris				Adequate	Satisfactory	Effective
6	AP-6.28Q REV 0 ICN 1	J. Flaherty				Adequate	Satisfactory	Effective
7	AP-7.5Q REV 1 ICN 0	J. Flaherty		#2		Adequate	Satisfactory	Effective
15	AP-15.3Q REV 0 ICN 0	J. Voigt				Adequate	Satisfactory	Effective
16	AP-16.1Q REV 5 ICN 0	C. Palay				Adequate	Satisfactory	Effective
17	AP-17.1Q REV 2 ICN 3	C. Palay				Adequate	Satisfactory	Effective
SII	AP-SII.2Q REV 0, ICN1	J. Voigt				Adequate	Satisfactory	Effective
SIII	YAP-SIII.6Q REV 1 ICN 0	J. Flaherty		#3		Not implemented	N/A	N/A
SV	AP-SV.1Q REV 0 ICN 3	C. Palay				Not implemented	N/A	N/A
App. C	AP-AC.1Q REV 0 ICN 2	J. Voigt				Not implemented	N/A	N/A
	ORD Policies	C. Palay				Adequate	Satisfactory	Effective

Attachment C – Objective Evidence Examined

PROCEDURE	OBJECTIVE EVIDENCE
LP-1.1Q-OCRWM	ORD organization chart
AP-2.1Q	The following employee training transcripts (identified by TrainServe ID) were reviewed: 15346, 1652, 16003, 1994, 2116, 728, 2637, 4154, 4519, 8603, 1587, 11530, 2217, 14735, 3055, 3770, 7125, 7357, 15762, 11506, 2061, 16546, 14280, 13678, 17225, 14279, 5829, 5937, 5065, 6054, 3132, 3374, 3770, 1437, 7110, 1898, 2103, 882, 6837, 5892, 14901, 6810, 17453, 2419, 2790, 10569, 4359, 13881, 11496, 8603, 11506, 16464, 2583, 13676, 15215, 11160, 5961, 7120, 8501, 13628, 16537, 11223, 12304, 8323, 1901, 8333, 14939, 12210, 11137, 2788, 10114, 11044, 14765, 11381, 14765, 11381, 4165, 4395, 4480, 4836, 16163, 7717, 5591, 8504, 6214, 6231, 13830, 3673, 7172, 11450, 11635, 1465, 15349, 11031, 11049, 3742, 5129, 11189
AP-2.2Q	The following employee VOOEs (identified by TrainServe ID) were reviewed: 2583 ORD, 11506, 7750, 517, 5207, 6533, 7081, 2993, 3376, 7423, 3770, 7125, 9306, 7434, 6538, 16839, 7227, 6829, 1465, 6373, 1616, 6414, 4480, 4086, 4165, 11137, 13628, 1145
AP-2.20Q	SA-OCRWM-OPS-2003-003, SA-OPS-2003-001, SA-OFO-2003-002, SA-OLAS-2003-001, SA-OPS-2003-007, SA-OFO-2003-005
LP-2.5Q-OCRWM	FY 2002 Quality Assurance Management Assessment Plan FY 2002 Quality Assurance Management Assessment Interim Report FY 2002 Quality Assurance Management Assessment Final Report
LP-4.1Q-OCRWM	Procurement DE-IA08-02RW12167, U.S. Geological Survey (USGS); Procurement DE-AC28-01NV12137, AECL Technologies inc. (AECL); Procurement DE-FC08-98NV12081/A000, University and Community College System of Nevada (UCCSN); Procurement DE-RP-08-00NV12101, Bechtel SAIC, LLC (BSC)
AP-5.1Q	AP-5.1Q, Revision 3, ICN 3, <i>Plan and Procedure Preparation, Review, and Approval</i> AP-2.1Q, Revision 2, ICN 2, <i>Indoctrination and Training of Personnel</i> LP-4.2Q-OCRWM, Revision 0, ICN 2, <i>Procurement of Services</i> AP-2.20Q, Revision 1, ICN 1, <i>Self-Assessments</i> AP-3.9Q, Revision 1, ICN 2, <i>Interface Management Process</i>
AP-7.5Q	Deliverable ID: PA0112900D, TDR-WIS-PA-000006, Revision 00, <i>Total System Performance Assessment – License Application Methods and Approach Document</i> , Deliverable ID: PACRIT024D, TDR-EBS-NU-000003, Revision 01, <i>Summary of the Supplemental Model Reports Supporting the Criticality Analysis Methodology Topical Report</i> ; Deliverable ID: PAD204, TDR-PCS-SE-000001, Revision 02, ICN 00, <i>Performance Confirmation Plan</i> , Deliverable ID: RPA 102000D, Work Package P3312232F5, <i>General Arrangement Drawings for Dry Facility #1 and Transported Receipt Building</i> , Deliverable ID: PAGSC2060D, WBS #1.2.0.9, <i>Annual Training Needs</i>
AP-16.1Q	ORD(O)-03-D-108, ORD(O)-03-D-110, ORD(O)-03-D-190
AP-17.1Q	Office of License Application and Strategy signature and initials list, Office of Project and Control & Management signature and initials list, Office of Facility Operations signature and initials list, Office of the Deputy Director ORD/OCRWM signature and initials list, MTS signature and initials list, Federal Budget Score Card Self-Assessment of Direct Operations Property Management, Transmittal of Self-Assessment Report SA-OPS-2003-001, Self Assessment of The Office Of Repository Development Human Resources Function, Transmittal of Self-Assessment Report SA-OCRWM-OPS-2003-003, Self Assessment of OPS (CMD) Desk Instructions And Head of Contracting Activity (HCA) Transition Plan, Maintenance of Requirements Traceability Network (RTN)/Standards and Requirements Identification Database (SRID) Policy, POL-YMP-2002-003, Records Package Table Of Contents For Verification Of Education and Experience for Tish Morgan
ORD Policies	AP-REG-013, <i>Revision 0, ICN 0</i> , POL-YMP-2003-002; <i>Preparation, Review, and Approval of Technical Direction Letters</i> ; POL-YMP-2003-004, <i>Contracting Officer (CO) Authorization Letters</i> ,